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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.             | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------------|------------------|
| 10/500,126  | 12/01/2004  | Gang-Hoon Lee        | HI-0205                         | 7383             |
| 34610   | 7590        | 03/14/2006           |                                 |                  |
| FLESHNER & KIM, LLP<br>P.O. BOX 221200<br>CHANTILLY, VA 20153 |             |                      | EXAMINER<br>VOGELBACKER, MARK T |                  |
|   |             |                      | ART UNIT                        | PAPER NUMBER     |
|   |             |                      | 3677                            |                  |

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |  |                                   |  |
|------------------------------|--|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/500,126   | <b>Applicant(s)</b><br>LEE ET AL. |  |
|                              | <b>Examiner</b><br>Mark T. Vogelbacker | <b>Art Unit</b><br>3677           |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/9/2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3,5-7,9-16 and 20-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,5-7,9-16 and 20-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 22 and 23 are objected to because of the following informalities:

Regarding claim 22, page 7, line 2, the phrase “in braking housing” appears to be missing a preposition that would provide proper antecedent basis for the limitation “braking housing”.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 5-7, 9-16, 20-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 20, the phrase “that tends to” in lines 10 is vague and indefinite. Does the frictional force always prevent the pivotal plates from rotating or does this only happen when certain conditions are met? The same phrase is used in claim 28, page 9, line 12 and claim 35, page 10, line 9.

### ***New Grounds of Rejection***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 35 is rejected under 35 U.S.C. 102(b) as being anticipated by Wang et al., GB-2,266,920 A.

Figure 1 of Wang discloses the invention as claimed, including a fixed plate (34), a pivotal plate (22), a rotation shaft (30), a braking member (10) and a braking housing (20). As seen in Figure 4, the fixed plate (34) is attached to a support structure for a display device and the pivotal plate (22) is attached to the display device. Further, the braking member (10) is cylindrically configured and inserted in the circular contact face between the outer circumference of the rotation shaft (30) and the inner circumference of the braking housing (20). A washer (24) is located between the pivotal plate (22) and an end of the braking housing (20).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 5-7, 9-16, 20, 21, 24-29, 32-34 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al., GB-2,266,920 A in view of Okada et al., US-5,109,570.

Figure 1 of Wang discloses the invention as claimed, including a fixed plate (34), pivotal plates (22), rotation shafts (30), braking members (10) and braking housings (20). As seen in

Figure 4, the fixed plate (34) is attached to a support structure for a display device and the pivotal plates (22) are attached to the display device. Further, the braking members (10), which are made of engineering plastic (pg 3, ln 13), are cylindrically configured and inserted in the circular contact face between the outer circumference of the rotation shafts (30) and the inner circumference of the braking housings (20). However, Wang does not mention stoppers, stopper guides or anti-release members. Okada teaches the invention as claimed, including a fixed plate (10), pivotal plates (18), rotation shafts (11a), braking housing (14d) having stopper guides (14b, 14c) and stoppers (13). The stopper guides (14b, 14c), which are integrally provided on the braking housing (14d), have a projection-receiving groove in the outer circumference. The stoppers (13) have a folded stopper projection (13d) fitted around the rotation shaft (11a). Washers (12, 15, 16) are provided at various locations in the hinge structure. Washer (12) has a non-uniform profile with a cut-out (12b) that can correspond to the projection receiving groove of a stopper guide (14b, 14c) if the washer (12) is aligned properly. A fixing portion (11d) is provided on the first end of a rotation shaft (11a) for allowing a stopper (13) to rotate with a rotation shaft (11a) via a shaft-supporting portion (13b). Further, Okada teaches anti-release members (17), with multiple folded faces, to stably support the stopper (13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Wang device to include stopper guides and stoppers, as taught by Okada, to prevent rotation of the display device past a desired state (col 4, lns 45-50).

Regarding claim 5, *Merriam-Webster's* dictionary defines "riveting" as "to fasten firmly". Therefore, Okada teaches a stopper guide (14b, 14c) that is fastened firmly to the fixed plate via the housing fastener (10d).

Regarding claims 10, 25 and 37, Okada teaches washers (12, 15, 16) provided at various positions in the hinge structure, but does not mention a washer between the stopper guides and the stoppers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the location of the washers, as claimed, since it has been held that rearranging parts of an invention involves only routine skill in the art.

Regarding claims 21 and 29, Okada teaches a housing fastener (10d) that attaches the braking housings (14d) to the fixed plate (10), but does not mention a plurality of housing fasteners. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add additional fasteners, as claimed, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

#### ***Allowable Subject Matter***

8. Claims 22, 23, 30 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office Action.

#### ***Response to Arguments***

9. Applicant's amendment filed February 9, 2006 regarding rejections under 35 U.S.C. 102 of claims 20, 3, 5 and 7 has been fully considered. Due to the amendment to the claims, the prior art fails to further anticipate. Accordingly, the Examiner has withdrawn all previous rejections over Wang et al., GB-2,266,920 A.

10. Applicant's arguments with respect to the rejection over Wang et al., GB-2,266,920 A in view of Yang, US-5,467,504 of claim 6 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed February 9, 2006 regarding rejections over Wang et al., GB-2,266,920 A in view of Okada et al., US-5,109,570 have been fully considered but they are not persuasive.

Regarding Applicant's arguments on page 15, lines 16-18, Examiner agrees with Applicant that Wang does not disclose stopper guides. However, this is why the Examiner relies on the teachings of Okada to be combined with Wang to reject claim 28.

Regarding Applicant's arguments on page 16, lines 6-11, one of ordinary skill in the art would agree that adding rotation limiting structure to Wang would improve the device. Okada teaches a hinge structure similar to that of Wang that includes rotation limiting structure. Further, Okada explicitly provides motivation to add rotation limiting structure to prevent rotation of the display device past a desired state (col 4, lns 45-50). This motivation was set forth in the previous Office Action on page 6, lines 8-11.

Regarding Applicant's arguments on page 16, line 12 through page 17, line 1, Okada teaches the invention *as claimed*, including a fixed plate (10), pivotal plates (18), rotation shafts (11a), braking housing (14d) having stopper guides (14b, 14c) and stoppers (13). Further, the rotating shaft (30) of Wang is "coupled" to the fixed plate (34) via engaging portions (31, 32) and the rotating shaft (30) is "exposed" through the connection member (35). In regards to lines 19-21 of page 16, the Examiner is unclear as to what is "the rotation limiting engaging portions of the fixed plate 22" are? The limitations on which the Applicant relies are not stated in the

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claims. It is the claims that define the claimed invention, and it is the claims, not specifications that are anticipated or unpatentable.

Regarding Applicant's arguments on page 17, lines 2-7, that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level or ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the Applicant's disclosure, such a reconstruction is proper.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

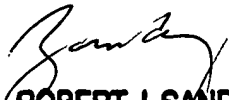
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark T. Vogelbacker whose telephone number is (571) 272-1648. The examiner can normally be reached on 8:00 am - 5:30 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MTV

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